

A Dyadic Approach to Infertility Stress on Quality of Life of Infertility Couples in Wukari LGA.

Boma Rogers Allison Ph.D ; Joseph Peace,. Sunny Dike

Department of Sociology, Federal University Wukari, Nigeria

E-mail: hartaboma@gmail.comrichardeshun@ymail.com.

*Corresponding Author: Boma RA, Received:3/6/2022| Accepted: 6/6/2022 |Published: 8/6/2022|

Abstract: *This study examined the dyadic approach to infertility stress in infertile couples, with a view to make useful suggestions and recommendations as way of alienating the infertility stress in infertile couples. The population for the study includes indigenes and non- indigenes of Wukari LGA, Taraba State and the sampling method adopted for the study is the stratified random sampling in order to ensure adequate representation of the population. In order to achieve the objective of making useful suggestions that would improve the child development, three hypotheses were made and tested. Samples of one hundred (100) responses were collected and analyzed using the Independent Samples Test statistic. It was discovered that: Psychological trauma due to infertility, Crying for days due to infertility, Blaming one-self for being infertile, Quarrelling with people over the least provocation and Contemplation of suicide for being infertile. It is recommended that: Infertile persons should not be only physically examined and treated for infertility but should also be given counselling to lessen the psychological trauma attached to infertility and Nurses can play vital roles in counseling infertile couples.*

Keywords: *Infertility, Stress, Dyadic, Couples.*

INTRODUCTION

Infertility is clinically defined as the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse (Zegers-Hochschild, F., Adamson, G. D., de Mouzon, J., Ishihara, O., Mansour, R., Nygren, K., van der Poel, S., 2009). It is estimated that infertility affects 9% to 10 % of the population worldwide (Boivin, Bunting, Collins, & Nygren, 2007) and a similar prevalence was found in Portugal (Silva-Carvalho & Santos, 2009). At least one-third of couples experiencing infertility will recur to Assisted Reproductive Technology (ART) to achieve parenthood. Undergoing ART can be an emotional and physical burden, affecting emotional adjustment, in infertile couples (Eugster & Vingerhoets, 2009). Infertility has been considered a major life crisis in couples, representing the inability to fulfill an important goal in couples' life: the wish to bear a child. It has been reported that infertile couples can experience emotional and relational difficulties due to infertility diagnosis and its treatment, namely high emotional reactivity and

psychological distress, impairment in quality of life, marital problems, and infertility stress and concerns (Cousineau & Domar, 2007; Watkins & Baldo, 2004).

Emotional reactivity and psychological distress have been the two main dimensions assessed in couples' emotional adjustment to infertility, although some inconsistencies in results have been found. The majority of studies have found that couples, but mainly women, do present higher levels of anxiety and depression than controls (Wischmann, Scherg, Strowitzki, & Verres, 2009). A couple has to face lot many problems as result of infertility. A couple that is unable to conceive for a long time would experience feelings of loss, distress, and disappointment. They have to look towards many medical options that would make them uncertain, and it will cause a lot of emotional disturbances for most of the couples. If they find themselves feeling anxious, depressed, or isolated, they are not alone (Paulson & Sauer, 2015). Depression may be periodic or cyclical, occurring with each menstrual period in interpreted almost

as repetitive pregnancy "losses". Or the sense of loss may be constant throughout therapy (Gerrits, 2018). The loss of their dream, their hopes becoming more intense with each failed cycle, each failed new therapy. The "losses" associated with infertility are often not tangible, not apparent to family and friends. There exists no socially acceptable mechanism to "grieve" these losses.

Infertile couples often must carry on with their lives and careers, feeling they must cope alone (Eugster & Vingerhoets, 2015). The couples' privacy and bodies are continuously invaded; there is a loss of personal control of sexual and bodily function. Feminine and masculine identities are challenged when testing reveals abnormal results. Self-confidence and self-esteem are comprised, and patients feel depressed, unhealthy and diseased (Daniluk, 2012).

Concept of Infertility

Infertility is recognized by medical standards from the American Society of Reproductive Medicine (ASRM), American College of Obstetricians and Gynecologists (ACOG), and the World Health Organization (WHO), as the inability to conceive or carry a pregnancy to term after 12 months of unprotected sexual intercourse (ACOG, 2019; ASRM, 2019; WHO, 2019a). Currently, in America the Center for Disease Control and Prevention (CDCP) estimates 1 in 8 couples in the United States (U.S.) are affected with infertility (CDCP, 2018). On a global level, the WHO considers infertility a global health issue, as over 186 million women in developing countries, or 1 in 4 women, have difficulty conceiving (WHO, 2019b). Globally, fertility rates have declined substantially, by almost half, since 1950 (Murray et al., 2018). In 2017, the U.S. had the lowest fertility rate in 30 years (Hamilton, Martin, Ostermann, Driscoll, & Rossen, 2018), and was 16% below the rate needed for population replacement (Matthews & Hamilton, 2019). Fertility rates continued to decline by another 2% in 2018, with Hamilton, Martin, Osterman, & Rossen (2019) reporting another record low. Declining fertility rates have been attributed to socio-economic causes, access to birth control, family planning, and lifestyle factors such as obesity and environmental hazards (Nargund, 2009). In the U.S., 33% of Americans report undergoing or knowing someone who has undergone infertility treatments (Livingston, 2018).

Classification and Causes of Infertility

Infertility is classified as primary or secondary. Primary infertility describes women whom have not been able to become pregnant or have not carried a pregnancy to a live birth. Secondary infertility occurs when women have not been able to conceive or carry a pregnancy following a previous ability to carry a pregnancy to live

birth (WHO, 2019). The causes of primary or 3 secondary

infertilities can be female factor, male factor, male-female factor, or unknown. Female factor infertility causes 30% of infertility in couples and includes hormonal or structural abnormalities that affect the female reproductive system (Cooper, 2019). Some examples of causes of female factor infertility are advanced age, premature ovarian failure, polycystic ovary syndrome, endometriosis, uterine lining abnormalities, uterus or fallopian tube defects, and hormonal or immunologic problems that affect the female reproductive system (Cooper, 2019). Male factor infertility affects 30% of couples with infertility and encompasses reasons for infertility such as low sperm count levels, or defects in the motility or structure of the sperm cell, ejaculatory disorders, or immunologic and endocrine problems (Cooper, 2019). About 30% of couples have a combination of female and male factors, and 10% have unexplained infertility (Cooper, 2019). Infertility is managed with different treatment modalities as described in the following section.

Infertility Therapies

For most individuals, infertility is treated with surgical or medical management. Structural defects of the reproductive system, such as fallopian tubal obstruction in women or testicular tube obstructions in men, may be repaired to restore fertility (Lindsay & Vitrikas, 2015). Women may take medications orally or subcutaneously to enhance ovarian stimulation or ova production, such as clomiphene citrate, letrozole, follicle-stimulating hormone, human menopausal gonadotropin, or gonadotropin-releasing hormone (Xia, Inagaki, Zhang, Wang, & Song, 2017). Other medications may be used to stimulate or "trigger" ovulation, such as Human Chorionic Gonadotropin (HCG), or medications may be taken during the luteal phase of the menstrual cycle to sustain progesterone levels. Progesterone is an important hormone in sustaining early pregnancy and is a necessary hormone for women undergoing In Vitro Fertilization (IVF)

Normally after ovulation, progesterone is secreted by the corpus luteum to support embryonic implantation and growth and immune responses. The use of progesterone in post-embryonic transfer, post-intrauterine inseminations, and in women with recurrent miscarriages helps support the luteal phase and provides immunomodulatory effects to sustain a pregnancy (Ciampaglia & Cognigni, 2015). Genetic testing for couples may also be considered for couples with recurrent miscarriages to assess for chromosomal abnormalities in the man or woman and assess for thrombolytic syndromes that impact fertility (Ciampaglia & Cognigni, 2015). Advancements in technology have proved useful in treating infertility. Assisted reproductive technology (ART), such IVF, can be used to further help

men and women achieve pregnancy. The use of ART cycles has increased by 39% between 2007-2016 (CDC, American Society for Reproductive Medicine [ASRM], & Society for Assistive Reproductive Technology [SART], 2018a).

Theoretical Framework

Transactional Theory of Stress and Coping

The Transactional Theory of Stress and Coping is one of the most widely used and supported theories for psychological stress and coping (Folkman, 2010). A notable revision to the Transactional Theory of Stress and Coping is the inclusion of meaning-based coping. Meaning-based coping, or meaning-focused coping, modifies appraisals to assign meaning on the stressor based on values, beliefs, and goals (Biggs et al., 2017). The use of meaning-based coping creates positive emotions and is helpful with chronic stress and uncontrollable situations (Biggs et al., 2017). The Transactional Theory of Stress and Coping has been used in a variety of disciplines, especially in psychology and sociology (Banerjee et al., 2014; Laubmeier et al., 2004). In the nursing profession, the Transactional Theory of Stress and Coping has been used in studies of chronic health conditions such as HIV, pain, chronic heart failure, and psychiatric disabilities (Rice, 2012).. Women with infertility may perceive high levels of stress that might not be clinically significant or much different than the overall stress levels of the general population (Greil, 2004).

METHODOLOGY

Research Design

Survey research design is the basic design adopted for this study. It involves the use of questionnaire or interview to gather information or data necessary for analysis of a phenomenon Reproductive Health Knowledge. Considering the nature of the variables involved and what is practical, the study also employed the explorative research design. This is because little

knowledge about the phenomenon studied. The study adopted both the quantitative and qualitative research strategy but more attuned to the qualitative strategy due to it being explorative in nature.

Objective.

To examine the extend of infertility stress on quality of life of infertility couples in Wukari LGA

Significance of the Study

It will draw attention of the government, professional and international bodies, non-governmental organizations and families to overcome the problems of Infertility, in Wukari LGA and Nigeria at large.

Sampling Size

Thus, the sample size of this study is approximately 120. That is, a total of 120 questionnaires was distributed. Closed-ended questionnaires were distributed to the one hundred and twenty (120) selected respondents to answer the research questions. The questionnaires were administered to each category of the targeted population based on the sample size.

Method of Data Analysis

The simple frequency distribution, simple percentage and chi- square method were adopted in the data analysis of this study. The frequency distribution and simple percentage method was used in analyzing the data obtained and chi- square formula was used in testing the hypotheses. In this study, the statistical software used to analyze the data is the statistical package for social sciences (SPSS). The rationale using this software is anchored on the fact that the primary data was used for the research and it gives comprehensive and quantitative clarity.

Presentation and Analysis of Data

Showing the extent of infertility stress on couples in Wukari LGA

S n	Item Statement	Strongly Agree		Agree		Strongly Disagree		Disagree		Total
		Freq	%	Freq	%	Freq	%	Freq	%	
1	Psychological trauma due to infertility	50	50	31	31	10	10	9	9	100 100%
2	Crying for days due to infertility	25	25	51	51	16	16	8	8	100 100
3	Blaming one-self for being infertile	24	24	60	60	9	9	7	7	100 100
4	Quarrelling with people over the least provocation	24	24	60	60	9	9	7	7	100 100
5	Contemplation of suicide for being infertile	34	34	56	56	5	5	5	5	100 100
6	violence due to infertility	25	25	51	51	9	9	8	8	100 100
7	divorce partner due to infertility	9	9	69	69	13	13	9	9	100 100
8	social stigma due to infertility	21	21	50	50	14	14	15	15	100 100
9	emotional stress for being infertile	50	50	31	31	10	10	9	9	100 100
10	anxiety and low self-esteem due to infertility	25	25	51	51	9	9	8	8	100 100

Source: Field Work, 2022

The table above shows vividly the presentation of respondents with respect to the hypothesis stated as the extent of infertility stress on couples in Wukari LGA.

Descriptive statistics is term given the analysis of data that help describe, show or summarize the characteristics of a data in a meaningful way. Mostly the features of data in the study.

Analysis and Result

The extend of infertility stress on quality of life of infertility couples in Wukari LGA

Table 8: Descriptive Statistics

Item Statements	N	Minimum	Maximum	Mean	Std. Deviation
Psychological trauma due to infertility	100	1.00	5.00	4.1000	1.20185
Crying for days due to infertility	100	1.00	5.00	3.7900	1.12182
Blaming one-self for being infertile	100	1.00	5.00	3.7500	.96792
Quarrelling with people over the least provocation	100	1.00	5.00	3.9300	.96667
Contemplation of suicide for being infertile	100	1.00	5.00	4.1300	.90626
violence due to infertility	100	1.00	5.00	3.9800	.65103
divorce partner due to infertility	100	1.00	5.00	3.6800	.94152
social stigma due to infertility	100	1.00	5.00	3.5900	1.23169
emotional stress for being infertile	100	1.00	5.00	3.7300	1.08110
Valid N (listwise)	100				

The table above provide the summary of the data in a meaningful way. We have the maximum value as 5 and the minimum is 1 with no missing value in the data used for the study. The mean values relatively the same, likewise the values of the standard deviation

Findings

From the descriptive statistics it is observed that the majority of the respondents believed that: Psychological trauma due to infertility, crying for days due to infertility, blaming one-self for being infertile, quarrelling with people over the least provocation, contemplation of suicide for being infertile, violence due to infertility, divorce partner due to infertility, social stigma due to infertility, emotional stress for being infertile, anxiety and low self-esteem due to infertility among infertile married couples in Wukari LGA.

Conclusion

In the course of the study we discovered that infertility stress affect the quality of life of couples in Wukari LGA, infertility affects marital adjustment of infertile couples in in Wukari LGA and depression due to infertility effects on quality of life of couples in Wukari LGA?

Recommendations

Infertile persons should not be only physically examined and treated for infertility but should also be given counselling to lessen the psychological trauma attached to infertility.

Nurses can play vital roles in counseling infertile couples. The infertile couples should talk about it with others (family, friends, husband)

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